In the claims:

Following is a complete set of claims as amended with this Response.

1-29. (Canceled)

30. (Previously Presented) A method for opening a communications stream comprising:

registering a first radio with a second radio by sending identification information to the second radio;

sending a request message to the second radio based on the registration to open a communications stream;

receiving a channel assignment message from the second radio in a first time frame in response to the request message, the channel assignment message including an identification of an assigned communications channel for the communications stream, the assigned channel being in a slot of a repeating time frame; and

sending data to the second radio in response to the channel assignment message in the assigned slot in a second time frame, the second time frame immediately following the first time frame.

31. (Previously Presented) The method of Claim 30, further comprising receiving data from the second radio in the assigned slot in the second frame.

32. (Previously Presented) The method of Claim 30, wherein the assigned channel is in a first slot for sending data to the second radio and in a second slot for receiving data from the second radio, the method further comprising receiving data from the second radio in the second assigned slot in the second frame.

33. (Previously Presented) The method of Claim 30, wherein sending the request message comprises sending a request message to the second radio based on the registration in an uplink random access slot of a time division multiple access frame to open the communications stream.

34. (Previously Presented) The method of Claim 33, wherein the random access slot is assigned during registering.

35. (Previously Presented) The method of Claim 30, further comprising:

sending a further request message to the second radio to open a further communications stream based on the registration;

receiving a further channel assignment message from the second radio in response to the further request message, the further channel assignment message including an identification of a further assigned communications channel for the further communications stream; and

sending data to the second radio in response to the channel assignment message.

36. (Previously Presented) The method of Claim 35, further comprising closing the first communications stream before sending the further request message.

37. (Previously Presented) The method of Claim 30, wherein the request message comprises an extended training sequence to assist the base station in measuring spatial parameters.

38. (Previously Presented) The method of Claim 30, wherein the request message includes information about a power level with which the request message is transmitted and wherein the channel assignment message includes information about a power level with which the first radio should transmit on the assigned communications channel.

39. (Previously Presented) The method of Claim 30, wherein the channel assignment message includes a timing correction for the first radio to apply when sending data over the assigned communications channel.

40. (Previously Presented) The method of Claim 30, further comprising receiving a page from the second radio and wherein sending the request message comprises sending the request message in response to the received page.

41. (Previously Presented) A machine-readable medium having stored thereon data representing sequences of instructions which, when executed by a machine, cause the machine to perform operations comprising:

registering a first radio with a second radio by sending identification information to the second radio;

sending a request message to the second radio based on the registration to open a communications stream;

receiving a channel assignment message from the second radio in a first time frame in response to the request message, the channel assignment message including an identification of an assigned communications channel for the communications stream, the assigned channel being in a slot of a repeating time frame; and

sending data in response to the channel assignment message to the second radio in the assigned slot in a second time frame, the second time frame immediately following the first time frame.

42. (Previously Presented) The medium of Claim 41, wherein the request message comprises an identification of the registration information.

43. (Previously Presented) The medium of Claim 41, wherein the instructions for sending the request message further comprise instructions which, when executed by the machine, cause the machine to perform further operations comprising sending the request message on a random access channel that was assigned to the first radio during registering and that is shared with other radios.

44. (Currently Amended) A method for opening a communications stream comprising:

registering a first radio with a second radio by receiving identification information from the first radio;

receiving a request message from the first radio based on the registration to open a communications stream;

sending a channel assignment message to the first radio in a first time frame in response to the request message, the channel assignment message including an identification of an assigned communications channel for the communications stream, the assigned channel being in a slot of a repeating time frame; and

sending data to the second ~~first~~ radio based on the channel assignment message in the assigned slot in a second time frame, the second time frame immediately following the first time frame.

45. (Previously Presented) The method of Claim 44, wherein the request message comprises an identification of the registration.

46. (Previously Presented) The method of Claim 45, wherein the request message comprises an extended training sequence, the method further comprising using the extended training sequence to measure spatial parameters of the request message.

47. (Previously Presented) The method of Claim 46, wherein sending the channel assignment message comprises sending the channel assignment message using the spatial parameters.

48. (Previously Presented) The method of Claim 46, wherein registering comprises assigning a random access channel to the first radio, the assigned random access channel being shared with other radios and wherein receiving the request message comprises receiving the request message on the assigned random access channel.

49. (Previously Presented) The method of Claim 46, further comprising sending a page to the first radio and wherein the request message is in response to the sent page.

50. (Currently Amended) A machine-readable medium having stored thereon data representing sequences of instructions which, when executed by a machine, cause the machine to perform operations comprising:

registering a first radio with a second radio by receiving identification information from the first radio;

receiving a request message from the first radio based on the registration to open a communications stream;

sending a channel assignment message to the first radio in a first time frame in response to the request message, the channel assignment message including an identification of an assigned communications channel for the communications stream, the assigned channel being in a slot of a repeating time frame; and

sending data to the first radio based on the channel assignment message in the assigned slot in a second time frame, the second time frame immediately following the first time frame.

51. (Previously Presented) The medium of Claim 50, further comprising instructions which, when executed by the machine, cause the machine to perform further operations comprising receiving data from the first radio in the assigned slot in the second frame.

52. (Previously Presented) The medium of Claim 50, wherein the assigned channel is in a first slot for sending data to the first radio and in a second slot for receiving data from the first radio, the medium further comprising instructions which, when executed by the machine, cause the machine to perform further operations comprising receiving data from the first radio in the first assigned slot in the second frame.

53. (Previously Presented) A method for opening a spatially directed radio communications stream comprising:

registering a first radio with a second radio by sending identification information;

sending a request message to the second radio based on the registration to open a communications stream;

receiving a spatially directed channel assignment message from the second radio in response to the request message, the channel assignment message including an identification of an assigned communications channel for the communications stream; and

sending data to the second radio and receiving spatially directed data from the second radio over the assigned communications channel in response to the channel assignment message.

54. (Previously Presented) The method of Claim 53, wherein the request message comprises an extended training sequence to assist the second radio in determining spatial parameters, and wherein receiving the channel assignment message comprises receiving the channel assignment message directed using the spatial parameters.

55. (Previously Presented) The method of Claim 53, wherein the channel assignment message comprises a training sequence and wherein the extended training sequence is at least twice as long as the channel assignment message training sequence.

56. (Previously Presented) The method of Claim 53, wherein the request message comprises an identification of the registration information.

57. (Previously Presented) The method of Claim 53, wherein the assigned communications channel is shared with other radios.

58. (Previously Presented) The method of Claim 53, wherein registering further comprises sending configuration information including information regarding capabilities and communications environment of the first radio.